

Application No. 10/811672
Page 5

Amendment
Attorney Docket No. H01.2B-11499-US01

Amendments To The Claims:

1. (Currently amended): A braking system for battery-powered industrial trucks, the trucks having wheels, one of which is a driving wheel, the system comprising:

a three-phase driving motor (10) which drives a driving wheel,

a first braking device (12) associated with the driving wheel,

a brake pedal (20) with which a braking signal generator (22) is associated to generate ~~an~~ a first electric braking signal corresponding to a first desired braking force value in response to the excursion of the brake pedal (20),

a control device (14, 16) for the driving motor (10) through which the torque of the driving motor (10) is controlled,

a first conversion unit (32) in the control device which converts said the first braking signal into a desired torque value for the driving motor (10),

a second conversion unit (34) in the control device which detects and converts the actual torque value of the driving motor (10) into an actual braking force value and generates an actual braking signal, the braking device being controlled by a braking control device (18) through a second braking signal, the braking control device (18) including a comparator device (36) where in the first braking signal is compared with the actual braking signal to form the second braking signal for the breaking device

Application No. 10/811672
Page 6

Amendment
Attorney Docket No. H01.2B-11499-US01

~~a comparator device (36) in a braking control (18) in which the first desired braking force is compared to the actual braking force to form a second desired braking force for the second braking device (44, 46).~~

2. (Currently amended): The braking system as claimed in claim 1, characterized in that wherein a third conversion unit (38) is provided which transforms ~~the second actual desired braking force signal~~ into a braking current for a current controller (40,42) to generate the second braking signal for the braking device and a current regulator (40, 42) predetermines ~~said second desired braking force for the second braking device (44, 46)~~ in response to a current braking force characteristic.

3. (Currently amended): The braking system as claimed in claim 1, characterized in that the brake control device (34) generates a hard stop signal for said first braking device (12) when the braking signal of said braking signal generator becomes a maximum wherein a hard stop braking device (12) is associated with the driving wheel and the braking signal generator (22) generates a hard stop signal (50) for the hard braking device (12) if the first braking signal becomes a maximum.

4. (Currently amended): The braking system as claimed in claim 1, characterized in that the brake control device (18) generates a hard stop signal for said first braking device when a monitoring device receives an error signal with regard to ~~said second braking device (44, 46), the steering of the industrial truck or said braking signal (20)~~ wherein a hard stop braking device is associated with the driving wheel and the brake control device (18) generates a hard stop signal for the hard stop braking device if the braking signal generator receives an error signal.

Application No. 10/811672
Page 7

Amendment
Attorney Docket No. H01.2B-11499-US01

5. (Currently amended): The braking system as claimed in claim 3, characterized in that
~~said wherein the hard stop signal is provided to said first~~ the hard stop braking device (12) via
a time delay member.

6. (Currently amended): The braking system as claimed in claim 1, characterized in that
wherein the industrial truck has a travel direction sensor and/or a load sensor sensing the load
imposed, the signals of which are inputted to the brake control device (18) which varies the
second braking signal and ~~said~~ brake control device varies the second desired braking force in
dependence on the direction of travel and/or the load.

7. (Currently amended): The braking system as claimed in claim 1, characterized in that
wherein the industrial truck has a lifting height sensor, the signal of which is provided to ~~said~~
~~brake control device~~ and the second desired braking force is varied in dependence on ~~said~~ lifting
height the brake control device (18) which generates a second braking signal varying in
dependence of the lifting height.